THE FARM.

THE SOIL, AND SOMETHING ABOUT IT.

We will assume that good ploughing has been done, and that the field is turned over, and lying with its fresh surface exposed to wind and weather. The length of time that the ploughed field should be left before being worked down depends, of course, firstly on the time at the farmer's disposal, and, secondly, on the type of soil. It is best to leave the land till the weeds start to come up, and then give it a good discing with the furrow. This may have to be repeated if the land is heavy and does not cut up too well the first time. The second stroke of the discs will do far better if the tine harrows are run over the once-disced soil to stir it up and level the surface. If the discs are used several times without a harrowing in between the surface of the ground gets very uneven and is bad for rolling. This is especially so in heavy country. If the field can be left now for a few days, it will do it a great deal of good. If in the meantime much rain has fallen it will pay to disc again before harrowing. A good heavy tine harrows is both economical, in that they do not easily break, and efficient as the tines get well in and stir the soil deeply as well as pull out the weeds. If the farmer has a lot of ground to work down, a good big spread of harrows (say five leaves) will soon save their cost in time saved. A four-horse team drawing a five-leaved set will harrow thirty acres or more per day. After the harrows have done as much good as they can do it must be decided what implement will come next. If there are many clods it might pay to disc again. If the surface is lumpy then the roller is needed. A very useful home-made clod crusher may be made as under:— Cut four bluegum poles of a length suitable for negotiating strength of the team. These poles are chained together about two feet apart, and a suitable coupling is fixed on to the middle of the front pole. A seat can be fastened on to the crusher where it is thought to be convenient. It will be found that this simple implement is very cheap, and it does excellent work. It will break up clods and lumps, and leave a good seed bed behind it.

After the paddock is rolled or crushed it may be necessary to tine-harrow again, and, indeed, these operations of rolling and harrowing should alternate till the surface is in a state of fine subdivision and the weeds are dead on top. After the final rolling some farmers prefer to give the paddock a stroke with the tripod harrows,-bevel edge first, or one with the inverted tines to make a good bed to sow on.

A good many men have the implements, and they work by rule of thumb, plough, disc, harrow, roll, and sow. That may be all right in some cases, but in the great majority of cases the paddock would neither be clean nor worker. It should always be a hard and fast rule never to sow a seed until the paddock is clean. If the paddock is not clean, it simply means that the ploughing and subsequent work is wasted, as all the farmer will get will be a good crop of weeds and a stunted lot of specimens of the crop he has sowed. It cannot be too clearly understood that the very best job made of the paddock is absolutely the only one that will do. Many of our readers, no doubt, will say that this looks verp nice on paper, and that the time taken up will be too great. That is not so, and what is written here is the result of practical experience. The man who saves time and gets his crop in first will practically always find that his neighbour who has made a good job of the paddock and sowed his seed a bit later will have a far better crop, which will soon catch up to the one sown first.

In connection with working up a good seed bed for sowing grass-seed on, you will hear many farmers say when a very mediocre job of the plough and working has been made, that "it dosen't matter; it's only for grass." That is just where they make a mistake and big one at that. They will go to a lot of trouble to get a successful crop of oats, swedes, mangels, etc., which is only in the ground for a short time comparatively before it is harvested or eaten off, but with grass, which is put into last three, five, or perhaps thirty years, they will skimp their work, and sow the seed to grow or die as it likes, and then wonder "what is wrong with the seed." It is just as well to state here that unless in the first case there is a good take of grass-seed, the paddock will never be a good one. You may let it run to seed in the first spring and summer, and in that way improve a bad take, but there are many spaces now growing weeds which would not have got a hold if the grass-seed had been given a fair chance. The same may be said in the case of lucerne; unless the weeds are killed the stand of lucerne will be spoilt.

GARDEN NOTES.

THE VEGETABLE GARDEN.

We are now near the shortest day; hence the neccessity for getting through with all trenching, manuring, and digging, so as to give the ground a better chance of producing fine crops by being exposed to the action of the weather. Liming the soil is of great assistance to crops. This is best done immediately after the ground has been turned up.

The stems and large leaves of globe artichokes, should now be cut down, and some warm stable litter packed around the crown.

Cut down dead tops of Jerusalem artichokes, and dig them as required They are inclined to shrivel and get tough if they are lifted much before they are needed. Should the ground be required upon which they are grown, dig and pit them as one would potatoes. This is done by stacking them up neatly and covering with clean and dry straw, finishing off with a covering of fine earth firmly patted down. A small hole may then be made, so as to enable them to be taken out as required.

The ground upon which rhubarb is grown should be cleared of weeds and dead leavee, and the crowns covered with good fresh stable litter. This acts as a stimulant. The rain washes down the manure from the straw, and consequently strengthens the crowns and fits them for the production of next season's crop.

VINE PRUNING.

In most cases the vines should be sufficiently ripe to have shed their leaves and fit them for pruning. The sooner this is accomplished after the leaves have fallen the better, as it gives the wounds time to heal before the sap commences to rise. The best way to prune is this: Cut the strings and let down the canes, so that they may be more easily got at, as they not only require pruning, but also an overhaul by scraping and cleaning off all loose bark. This should not be carried to excess. All that is required is to pull away all loose bark. Around the old spurs it will be easier to scrape it off with an old blunt table or pocket knife. To do this successfully one must have good tools a sharp pruning knife, a sharp pair of pruners, and fine tooth saw. The latter tool will not be required if the vines are young but in pruning all old or established vines this is a very necessary implement, as there are sure to be some old, dried-up spurs to be cut away, and the fine saw is the best for this. Smooth off the cut with a sharp knife.

In pruning vines, cut back to the first plump eye on the young growth, next to the old wood on the spur. The sharp blade should enter immediately beyond the bud and have a downward cut, as it were, to go with the hang of the wood. To give an upward cut and against the hang of the wood would in all probability cause a ragged cut; that is, to look carefully into it, you would see lots of minute cracks running across the end of where the knife had passed through. Such cuts cause bleeding when the sap commences to rise in the spring. In nine cases out of ten vine bleeding is caused by cuts such as described. Prune, then, to the first suitable eye plump and pointing outwards. It sometimes happens that the eye is pointing downward from the under part of the shoot, or it may be a curved shoot, with the eye pointing directly inward. If so, prune at the next eye. Never leave two eyes if it can be avoided, as long pruning causes long spurs, and if this class of pruning were carried on for a few years the spur would get so long that there would not be sufficient room for the foliage to expand—that is, if the vines were planted at the proper distance—hence the waste of valuable space, to the detriment of the vines, or at least the crop. When all pruning and cleaning is completed, rake up and sweep out and burn all clippings and rubbish, and if mildew has been prevalent the previous season, scrape out the surface soil and all plants that may be in the vinery, and give the house a good fumigating with sulphur by burning it upon an iron pan or something of the kind. On no account leave lighted plants in the house, as they will be killed with the sulphur fumes. It would be advantageous also if the woodwork inside the vinery could be painted or whitewashed.

—The Pruning of Fruit Trees.—

Before a beginner commences pruning he should learn thoroughly the different parts of a tree. Without knowing this it is impossible to become expert at this work. To describe the different parts of a tree we will start at the roots. First, there is the main tap root—second, the lateral root, the fibrous roots, and the root hairs. He will soon find out these different parts if when lifting a young and healthy tree he traces each part from the trunk downwards until he comes to the small hairs that form at the root extremities. Now for the tree, which is the most important. There are the main stem (or trunk), the main arms (which extend from the stem), the secondary arms, the leading shoots, the lateral shoots, the spurs, and the buds. Notice how Nature has made the root portion of the tree to correspond with the top. Without these small fibrous and hair roots it would be impossible to have fruit. So you see how important it is to have the ground in such a condition as to produce these roots, and also at planting to see that the secondary roots are properly cut back, so that young fibrous roots may form.

HORTICULTURE.

MORE HARDY PERENNIALS.

Pyrethrum.—Teverfew is generallp classed under this heading but is so well-known as an edging plant especially the "Golden Feather" (Parthenium Aureum), as to require no further reference. The coloured Marguerites, or single or double flowered varieties of P. Coccineum are well worth growing and useful both for garden decoration and cutting, lasting well in a cut state and giving almost all shades of colour except blue. They are easily raised from seed and a pretty assortment can be got from a packet of a good strain. They can also be got from a division of the roots, early spring being the best season for dividing. To get the best results dig deeply and give plenty of manure, fork well round old clumps in autumn as their dense fibrous roots easily become too dry during summer. There are many named varieties but such are not easy to get as nurserymen seldom keep a stock.

The White Bachelors Button, a variety of Ranunculous is well worth growing, giving large sprays of pure white flowers in spring, making good clumps and remaining in bloom a considerable time. Very effective for cutting.

Romneya Coulteri, the giant Californian Poppy is a shrubby plant and grows into quite a large bush in a sheltered spot. The flowers are admired, being large and poppy-like, pure white with a centre of yellow anthers, and fragrant in smell.

Saponaria Ocymoides is well worth growing either for rockery or as a dwarf border plant. It has long trailing, wiry shoots giving a mass of crimson or pink blossoms in summer, and if the seed-covered tops are removed after blooming soon produce a mass of pretty shiny bronze foliage.

Saxifrages are a quite a tribe, varying greatly in size of growth, foliage, and form of bloom, from the small mossy varieties. The "encrusted" section cover the ground with small silvery rosettes of foliage with many coloured flowers on stems from three to six inches high, and are suitable for rockeries.

S. Umbrosa is the well known London Pride. Then we have the ladge leathery leaved Megasea section, such as the pink variety Cordifolia with clusters of flowers on stout stems a foot or more high, as well as a large miscellaneous section.

The Caucasian Scabious is an extremely popular flower which should be in every garden. It is easily grown, blooms profusely from spring to late autumn with flowers from pure white to all shades of lavender, to clear bright lavender blues, on large slender stems ideal for cutting. Easily grown from seed. When once you have both white and blue established and growing fairly close together save your own seed and you will get a charming collection in endless variety of form and colour.

Viola.—The ordinary garden varieties are grown like pansies and grown greatly as edgings, especially the blue shades, but of late years many varieties have been produced and can be reproduced in many colours and forms and with varied markings from a good packet of seed. There are also some fine pure selfs, the best of which must be obtained purchasing plants. Gracilis, which is so popular and much sought after on account of its violet-like flowers, is quite distinct, especially in habit of growth as instead of the ordinary pansy growth, it forms clumps of roots with running roots under the surface of the ground and thus is perpetual without any necessity to raise any new plants. By cutting back at different periods of the year a succession of blooms throughout the whole year can easily be obtained.

A message from New York states that a clothing firm has been fined £6000 on six charges of profiteering.